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10/532,293	12/20/2005	Robert Heimbach	P05,0152	8611

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EXAMINER
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ART UNIT	PAPER NUMBER
2854	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/532,293	HEIMBACH ET AL.
Office Action Summary	Examiner	Art Unit
	ANTHONY H. NGUYEN	2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *12/22/2009*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *50-100* is/are pending in the application.
    4a) Of the above claim(s) *73-100* is/are withdrawn from consideration.
5) ☒ Claim(s) *50-72* is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

December 22, 2009 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or
in public use or on sale in this country, more than one year prior to the date of application for patent in the
United States.

Claims 50-72 are rejected under 35 U.S.C. 102(b) as being anticipated by Soler

et al. US Patent No. 5,489,969.

In re claims 50, and 72, Soler discloses a device and method for control of a

printer or a copier, comprising the steps of determining information that refer to a single

sheet from print data supplied to the printer or copier (image files which correspond to

the print jobs is stored in memory 61, fig. 5, col. 8 lines 33-48 and 1-13); dependent on

said information, determining a transport path of the single sheet through the printer or copier to generate at least one print image on at least one side of the sheet (Depending on duplex or simplex mode, path that the sheet takes is changed, fig. 10, col. 10 lines 31-36); providing a system time of the printer or copier that is the same for at least first and second control units of the printer or copier (plural and interconnecting processors are provided in figs 5-7, in order for the system to function properly, same time must be provided for the processors, col. 9 lines 15-45, col 13 lines 1- 50); and establishing at least one desired point in time at or until which at least one sensor signal is expected or at least one actuator is activated dependent on the transport path, said desired point in time referring to said system time of the printer or copier (If sheet is duplex, gate is actuated to invert the sheet, fig. 10, col. 10 lines 47-54).

In re claim 51, Soler discloses wherein the system time is predetermined by a timer with help of a counter that counts a clock signal with a constant frequency (a sync signal at regular interval is used to determine among other things, a time when a sheet should be fed, col 13 lines 1-16).

In re claim 52, Soler discloses wherein the desired point in time determines the point in time at which an edge of the single sheet should arrive at the sensor.

In re claim 53, Soler discloses wherein the sensor comprises a light barrier or a swing arm switch by which a sensor signal is output upon arrival of a sheet edge (236, fig. 11, col 13 lines 36-39).

In re claim 54, Soler discloses wherein the sensor comprises a feedback device of an actuator by which a sensor signal is output upon reaching a predetermined actuator position (fig. 11, col. 13 lines 36-39).

In re claim 55, Soler discloses wherein the desired point in time determines a point in time at which the actuator is activated by a control unit of the printer or copier (Actuator would have to be activated at a desired time for duplex sheet to enter reversing path, col. 10 lines 47-54).

In re claim 56, Soler discloses wherein the actuator comprises a step motor or a valve (Stepper motor I/0 controller is used with signature booklet maker (SBM) for controlling operating of a sheet rotator, col. 9 lines 46-56).

In re claim 57, Soler discloses wherein a plurality of sensors and a plurality of actuators are provided in the printer or copier, a first part of the sensors or actuators are

connected with the first control unit and a second part of the sensors or actuators are connected with the second control unit (plurality of input/output printed wiring boards 138 (PWB) are provided where DIO#1 is connected to marking engine 132 PHN core 134 and finisher core 136, fig. 8, col 9 lines 35-46).

In re claim 58, Soler discloses wherein the control units have a same time normal (Control units needs to have same time in order to function properly).

In re claim 59, Soler discloses wherein a synchronization signal via which internal time control units of the control units are synchronized is supplied to the control units (sync signal is provided to be used among other things, a point in time a sheet is fed, col. 13 lines 2-6).

In re claim 60, Soler discloses wherein a sensor calculation process is associated with the sensor or an actuator calculation process is associated with the actuator in the control units (It is inherent that sensor calculation process is associated with the sensor).

In re claim 61, Soler discloses wherein at least two sensors and at least two actuators are provided, whereby a sensor calculation process is associated in the control unit with each sensor for monitoring and evaluation of the sensors, and an actuator calculation process is associated in the control unit with each actuator for activation of the actuators (sensors are provided to keep track of the paper and gates are provided for different modes, col. 11 lines 8-14).

In re claim 62, Soler discloses wherein a time control calculation process is provided in the control unit via which the desired points in time are compared with a real point in time, and via which a signal is output upon reaching or exceeding the desired point in time (Upon power up, various desired times (tl-t4) are generated at step 326, fig. 13, col. 13 lines 17-39).

In re claim 63, Soler discloses wherein at least two desired points in time are compared with the real point in time upon implementation of the time control calculation process (Upon power up, various desired times (tl-t4) are generated at step 326, fig. 13, col. 13 lines 17-39).

In re claim 64, Soler discloses wherein a same program element is respectively invoked and executed as a separate calculation process for monitoring or for evaluation of at least two sensor signals, the program elements being invoked or executed with

different initial values or different parameters (various sensor signals are inputted to controllers 138 and monitored via controller 54, and program controls in response to the input signals, fig. 8, col. 8 lines 27-63, col. 9 lines 35-45, lines 56- 67).

In re claim 65, Soler discloses wherein the calculation processes are executed in parallel by at least one of the control units (controller 54 is able to handle concurrent operations in the printing system, fig. 2, col. 8 lines 27-63).

In re claim 66, Soler discloses wherein the calculation processes are executed by a controller as tasks in a multitasking operation (controller 54 is able to handle concurrent operations in the printing system as the printer simultaneously scans originals and keeps track of location of copies and movements of gates and handles the finisher, col. 7 line 6 to col. 8 line 63)

In re claim 67, Soler discloses wherein a timeslot is associated with each calculation process, the calculation processes being executed by a controller in succession in the timeslots (controller 54 is able to handle subsequent or interactive processes, fig. 2, col. 7 line 6 to col. 8 line 63).

In re claim 68, Soler discloses wherein an operating system of a controller controls execution of the calculation processes (col. 9 lines 57-67).

In re claim 69, Soler discloses wherein a plurality of desired points in time are stored in a storage of a time controller and the desired points in time are compared by the time controller with a real point in time, a signal being output by the time controller upon reaching or exceeding at least one desired point in time (Upon power up, various desired times (tl-t4) are generated at step 326, fig. 13, col. 13 lines 17-39)..

In re claim 70, Soler discloses wherein the signal comprises an interrupt signal (signals will be associated with the time periods tl-t4 to send feedback of the location of the paper, col. 13 lines 17-39).

In re claim 71, Soler discloses wherein the desired points in time are sorted in the storage according to their temporal sequence, only temporally next desired points in time being compared with the real point in time (Times tl-t4 are corresponding to the location of the path the sheet takes, col. 13 lines 17-58).

Response to Arguments

Applicants' arguments filed on December 22, 2009 have been fully considered but they are not persuasive.

Applicant argues that Soler does not teach the step of establishing at least one desired point-in-time at or until which at least one sensor signal generate from the sensor is expected or at least one actuator is expected to be activated dependent on the transport path.

However, as explained above, Fig. 10, col. 10 lines 47-54 of Soler clearly teach the step of establishing at least one desired point-in-time at or until which at least one sensor signal generate from the sensor is expected or at least one actuator is expected to be activated dependent on the transport path since at a point-in-time the gate is expected to be actuated to guide the sheet to a duplex path or simplex path depending upon a signal from a controller. Therefore, Soler meets the step as broadly recited in claims 50 and 72.

Applicant argues that it is unclear how the gate of Soler is operated or switched since no point in time referring to a system time is provided.

Note that the control process of Soler is inherently controlled by a system time which is a time basis or a time-wise control of the gate for the copier or the printer.

Also, as explained above, Soler meets the steps and limitations as recited in claims 51-71.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169.

The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen, can be reached on (571) 272-2258.

The fax phone number for this Group is (571) 273-8300.

/Anthony H Nguyen/
Primary Examiner, Art Unit 2854